

85. (New) The method of claim 13 or 26, further comprising measuring the coupling specificity of a G alpha protein for a heterologous G protein-coupled receptor comprising:

(a) culturing a host cell in the presence of an agonist specific for the heterologous G protein-coupled receptor; and

(b) measuring the growth of the host cell in response to the agonist to determine the coupling specificity of the G alpha protein for the heterologous G protein-coupled receptor.--

REMARKS

With entry of this Amendment, claims 1, 3, 4, 6-13, 15-26, 29, 32-35, 38-41, and 52-85 are pending in this application. Claims 1, 27, 30-31, 36-37, and 42-51 have been cancelled without prejudice or disclaimer of the subject matter recited therein.

Applicants have amended claims 13 and 26 and request entry of claims 52-85. Support for the amendments and new claims is found in the specification at, e.g., pages 11-15 and in the examples. No new matter has been added.

In the Office action mailed September 9, 2002, the Office imposed a restriction requirement, asserting that the claims are directed to ten groups of inventions that are not so linked as to form a single inventive concept under PCT Rule 13.1:

Group I, claims 1, 3, 4, 6-12, and 27, drawn to a yeast host cell comprising a constitutively active heterologous G protein-coupled receptor;

Group II, claims 13 and 26, drawn to a method of screening compounds that bind to a G protein-coupled receptor to cause cell growth;

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Group III, claims 15-17, drawn to a yeast host cell comprising a mutated gene and a G protein-coupled receptor with improved functional interaction with G proteins;

Group IV, claims 15-19, drawn to a yeast host cell comprising a mutated gene and a G protein-coupled receptor which does not interact with desensitization machinery;

Group V, claims 15, 16, 17, and 20, drawn to a yeast host cell comprising a mutated gene and a G protein-coupled receptor for which there is a reduction in receptor degradation or sequestration;

Group VI, claims 15-17, drawn to a yeast host cell comprising a mutated gene and a G protein-coupled receptor lacking proper plasma membrane localization;

Group VII, claims 15 and 21-25, drawn to a yeast host cell comprising a mutated gene and a G protein-coupled receptor with an improved functional response due to the ratio of sterols in the cell membrane;

Group VIII, claims 29-44, drawn to a cell comprising a modified G protein alpha subunit gene;

Group IX, claim 45, drawn to a modified G protein alpha subunit protein; and

Group X, claims 46-51, drawn to a method of screening compounds that bind to a G protein-coupled receptor in a cell comprising a modified G protein alpha subunit gene. Office action, pages 2 and 3.

Applicants provisionally elect, with traverse, to prosecute Group II, claims 13 and 26 (and new claims 52-85 presented in this amendment), drawn to a method of screening compounds that bind to a G protein-coupled receptor to cause cell growth.

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The special technical feature of the elected invention is the method of screening compounds using constitutively active heterologous G protein-coupled receptors. This special technical feature is common to the method claims of Group II, and claims 52-85 entered in this Amendment.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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APPENDIX

**AMENDED CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE PURSUANT TO 37 C.F.R. § 1.121(c)(1)(ii)**

13. (Twice Amended) A method for screening compounds capable of binding to G protein-coupled receptors, said method comprising (a) subjecting [the host cell according to claim 1] a yeast host cell comprising a constitutively active heterologous G protein-coupled receptor to a test compound; and (b) measuring the effect of the test compound on cell growth.
26. (Twice Amended) A method for screening compounds capable of binding to G protein-coupled receptors, said method comprising (a) subjecting [the host cell according to claims 15, 18, 20, or 21] a yeast host cell comprising a heterologous G protein-coupled receptor, and a mutation of a host cell gene that results in an improved functional response of the G protein coupled receptor in a cell-based assay to a test compound; and (b) measuring the effect of the test compound on cell growth.

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